Patterns in Public Service Provision and Urban Development in Prewar Japan before 1945

Toshio Mizuuchi*

Abstract

The provision of public services by local government involves many aspects of society, politics, and economy. Recently, human geographers have come to focus on the concept of state intervention, especially on the political and economic role of central and local government, which has been stimulated by a growing concern for the debate of social theory. Making use of this intellectual stimulus, this analysis aims to develop a macro-theoretical, historical, and concrete approach in order to clarify the structure and pattern of municipal expenditure during prewar Japan before 1945. Taking into consideration the theoretical pluralism which realism implies, this analysis attempts to encompass several bodies of theories such as a materialist conception of the role of state and the outcome of the studies of public service. Within the structure and the process of municipal government intervention in urban development under Japanese capitalism, this study demonstrates the overwhelmingly energetic intervention into the construction of an urban built environment by the initiative of the six major metropolitan municipal governments. It also demonstrates both general and local specific features of the municipal government intervention of the other cities.

Key words: public service, collective consumption, state intervention, social theory, urban development, municipal expenditure.

1. INTRODUCTION

This paper will explore the arguments of modern urban history in Japan after the Meiji Restoration of 1868 and develop a logic of Japanese urbanization from the geographical viewpoint applying a macro-theoretical, historical, and concrete approach. I have already argued elsewhere that an analysis of the geographical development of cities should pay closer attention to the concept of collective consumption (Mizuuuchi, 1989). Since the concrete outcomes of the provision of collective consumption occupy specific spaces, urban study of the historical development of collective consumption should propose important themes for the arena of geography and contribute much to refining studies of Japanese modernization.

The concept of collective consumption has dominated the recent debate within urban studies about the role of the state in capitalist societies. Reflecting the current debate on collective consumption, this paper attempts to link the study of collective consumption to that of public service provision in order to further develop the studies of Japanese urban history. Considering this link, the term "state intervention" plays a significant role in analyzing both public service provision and collective consumption, since, as Castells (1977) has indicated, governments in advanced industrial societies throughout most of the 20th century have increasingly tended to intervene in the provision of goods and services. Unfortunately, the meaning of the term "collective consumption" is in much dispute despite its frequent use, therefore, the debate over the definition of this term is deferred until later (Pinch, 1989).

In this paper, I regard the historical process of this state intervention through the provision of mainly collective consumption within urban space as one of the critical features of urbani-
This perspective seems to parallel the recent attention given to the study of Japanese historical urban development after the Meiji Restoration. Kojita (1991) recognizes that the establishment of the modern city in Japan was characterized by the far-reaching penetration of municipal bureaucracy and its enterprise, which, in other words, implies the pervasion of public economies into municipal affairs such as the public provision of drinking water, sewage, electricity, gas, intracity transportation service, retail markets, etc. This perspective can be understood as the spatial development of public economies, or to use my term the spatial development of public services. Therefore, this study attempts to focus on the historical process of the provision of public services through the municipal government initiative which involves collective consumption, and to quantitatively assess the growing level of provision by municipal government in controlling and regulating urban spatial development through the analysis of municipal financial expenditure. It is believed that this type of geographical study will simultaneously contribute considerably to the progress of the study of Japanese modern urban history.

I shall, in the first section, outline the current debate of state theory within the studies of the provision of public service. For example, some geographers, who study political issues relating to the provision of public service, explore the theories of state and of the role of local government within the state apparatus, using arguments that understanding of their statistical results requires a theoretical appreciation of the nature of local government. In fact, there seems to be a growth of studies in urban finance, recognizing the rationality of the materialist perspective. After this, I shall make reference to one instructive study of urban finance from a materialist approach to the state.

Secondly, taking into account these current debates, the present study attempts to clarify the structure and the process of municipal government intervention in urban development under Japanese capitalism, by use of municipal expenditure data from the prewar days of Japan before 1945. It is matter of course that this empirical analysis of municipal gov-
government expenditures for public services responds to the current literature of modern urban history in Japan.

II. CURRENT THEORETICAL DEBATE IN THE GEOGRAPHY OF PUBLIC SERVICE

1. Conventional studies of the geography of public services and state theory

The study of public services in geography is now becoming more active especially in Britain and Anglo America. One can see the powerful influence of the political economy approach in this debate which has been maturing lately. As Peet and Thrift (1989) assert, human geography has changed dramatically and has matured theoretically in the past twenty years. Especially, the structural Marxist conception of society in the 1970s and early 1980s provided significant guidance for this development.

In this context, it was timely of Dear (1979) to emphasize the significant role of the state, spatial outcome and public facilities, in public sector geography. His orientation corresponded to a new round in the geography of the public sector, reflecting the flourishing discussions of social theory in geography, and the recent demands that geography must focus on the structural foundations of society.

In the geography of public service, three major types of analytical framework compete with each other: the public choice approach, the neo-Weberian approach and the neo-Marxist approach (Kirby et al., 1984). They are in controversy with each other as to how to effectively explain the reality of public service, and mutual agreement has not yet been attained. Therefore, studies of public service especially in geography cannot develop without holding in common the overlapping themes of neighboring disciplines such as political geography and urban geography.

For example, political geography has dealt with topics concerning spatial aspects of government and politics, especially of cities, investigating locational conflict, political participation, jurisdiction boundaries, and public services. At the same time numbers of political scientists and sociologists actively engage in studies of political urban issues from spatial and environmental viewpoints. The distinction between the study of public service and of political geography has rapidly disappeared, and now these approaches are mutually complementary. (Burnett, 1985)

On the other hand, urban geography per se is shifting its theme from the study of spatial entities to the analysis of urban issues, and the economic and political processes producing certain spatial configurations. Much research into the dynamics of the creation, reproduction and transformation of neighborhoods, cities and urban systems, is producing a new style of urban geography. The recent dialogue between political scientists and geographers flourishes on this issue. Yet, as Kirby et al. (1984) indicate, there is a remarkable degree of convergence of thought among both political scientists and geographers. They recognize both the importance of placing geographical factors into their broader social, political and economical contexts, as well as the powerful influence which spatial factors can play in shaping these broader phenomena.

Here, realist arguments seem to be a good stimulus for this recognition, since they claim that place creates structures of interaction, or the contexts in which interactions occur, and that some of the interactions that occur in the context of these structures serve simply to reproduce interaction, while others transform or reproduce the social structure (Thrift, 1983). The urgent problem which this analysis faces is how to study linkages between places, interaction structure, and the more general social structure.

In the following section, it is necessary to consider the outcomes of various levels of abstractions in conceptualizing these linkages between related disciplines. In the context of this analysis, we have to note at the outset the theory of the state in order to identify local government actions from a high level of abstraction; while the intermediate abstractions have to be noted in the examination of how local governments intervened in Japanese urban development. Low level abstractions are developed in the analysis of the specific local
activities in the provision of public services (Lawson and Staehehi, 1990).

I must here overview briefly the theory of the state in order to clarify the basic issues of the current debate of social theory in geography. The current discussion of theory of the state stems from the concept provided by Poulantzas (1973). Poulantzas highlights the state's actions which serve to maintain and reproduce a capitalist society despite the capitalists' inability to behave according to their collective interests. He stresses, in other words, the mechanism of how the state serves capital in spite of capital's ignorance of its own needs.

In this mechanism, he focusses on the role of planners within the capitalists' needs to develop capitalist society. He argues that planners serve to identify, organize, and legitimate the interests of capital, providing a critical mediating link between capital and the state. Concerning the internal mechanism of policy formulation to perform the above-mentioned state tasks, Offe (1974) explicitly explains that, assuming a formally democratic state, the state in capitalist society is confronted with two potentially contradictory objectives: facilitating capital accumulation, and maintaining democratic legitimacy. In the process of its policy formulation, he identifies planning as the best way to produce decisions facilitating capital accumulation.

Fogleson (1986) links this policy formulation of the capitalist democratic state to state intervention as planning in the process of urban development. He recognizes the role and task of planning that is necessary for the survival of capitalism, but also that capitalists cannot perform on their own. And he argues that many of these roles have to do with the mediation of the internal contradictions of capitalism and with the tendency of capitalism toward crises. He perceives as the central contradiction of capitalist urbanization that capital has an objective interest in socializing the control of land to provide public services, yet the institution of private property prevents attempts to socialize the control of land. Thus, urban planning has contradictory features, both in facilitating capital accumulation and by being threatened by the capitalist system. He calls this the property contradiction that has structured urban development.

Using Offe's (1974) idea, Fogleson also proposes a capitalist-democracy contradiction, which is a contradiction between the need to socialize the control of urban space and the danger to capital of truly socializing (democratizing) the control of urban land. In these contradictions, he vividly illustrates two significant roles and tasks of the capitalist state both to rationalize the development of land in order to maintain the conditions for accumulation and to check and balance the individual capitalist demands for public legitimacy. Then he goes on to suppose the existence of these two structural contradictions, which have influenced the course of development of urban planning as a method of policy formulation.

In this analysis, the roles of public service provision of municipal government in the historical development of the urban built environment must be clarified. It is also claimed that a plausible approach should embrace the totality of society from the overall social and historical perspectives. In this sense, it is worth stressing Fogleson's study, since he attempted to write a theoretically informed history to understand the American history of urban planning related to contradictions that are rooted in the structure of society.

Fogleson (1986) helps us to integrate studies of public service with those of state, and we can explicitly consider the questions of why public services are provided, the interests of various actors in services, and the ways in which services texture the political, economic, and social environments in which we live, as Dear (1979) has claimed. In the next section, I shall develop this implication toward the analysis of the pattern and the structure of municipal expenditure. Fortunately, I can introduce one instructive study, Staehehi (1989), from the materialist approach to the state.

2. The materialist approach to the study of public service provision

Staehehi argues that public services provided by the institutions of the local state are one way in which the politics of consumption and the politics of production are integrated.
critical of the existing public service studies which can only create the surface impression of the total outcome as chaotic or at least irregular, she claims the rationality of the materialist approach to the state, since this approach can provide the means by which this chaos can be rationalized. Following her assertion, she makes the materialist argument that local state institutions work through carrying out their basic two roles: the provision of an environment conducive to accumulation and the maintenance of the legitimacy of the political and economic systems. In other words, the local state performs these two roles in order to accommodate capital accumulation, reproduction of labor forces and to produce favorable conditions to maintain public loyalty.

Stæheli (1989, p. 239) argues that “the pattern of expenditures for public services among municipalities should provide evidence that is suggestive of the effects of these two political processes. In accordance with the politics of production, one can expect to see comparatively little variation in service levels between municipalities. Legitimation services conceivably will be less regular in the distribution if they truly reflect the demands of local population.” Then, she goes forward to demonstrate her assumption using expenditure data for general purpose government within metropolitan areas collected from the 1982 U.S. Census of Governments.

She assumes that accumulation aspects of services should reflect the needs of capital of production which is greatly influenced by forces and actors from the level of the world economy. On the other hand, legitimation aspects of services are primarily the domain of actors of consumption within specific locales. Quantitatively, this abstract difference anticipates that the distribution of services that are provided primarily to foster accumulation will be comparatively even, while the distribution of legitimation-oriented services will be more variable. Then she proposes a conceptual ranking which arranges services on a legitimation-accumulation continuum with the accumulation function at one end and legitimation on the other.

She conceives the services located on the accumulation end of the continuum to be infrastructure such as roads, water, and sewer systems which serve the needs of capital. These kinds of services are provided as the initial development of land and the preservation of its subsequent exchange value, and therefore their provision characterizes the local provision of accumulation services and is greatly influenced by higher levels of government and by the needs of large, mobile capital, even by the world economic system. Hence this influence affects the distribution of accumulation services evenly.

In contrast, legitimation services such as parks and libraries are provided for the benefit of the general classless public. Since this type of service is generally involved in many decision-making processes conducted by small groups and individuals, the demand for these services becomes unevenly distributed. She recognizes, in addition, that this variation is also influenced by the economic, cultural, and other social conditions in the various regions of the country.

She finally locates some services in the middle of the continuum such as police protection and local schools which blend accumulation and legitimation concerns, since both services are of intense concern to capitalists and noncapitalists alike.

According to her analytical framework, Stæheli describes quantitatively the pattern of municipal services calculating coefficients of variation of the service categories identified in the 1982 U.S. Census of Government. She calculates coefficients of variation of each service which expresses the standard deviation as a percentage of the mean. This coefficient allows us to evaluate each service as to whether it actually represents two components of services for accumulation or legitimation. Obviously, the pattern of service expenditure is different for both services, and the combined coefficients on accumulation services is 96 percent, as compared to 262 percent on legitimation services.

After explaining the reasons for the deviation of individual services from the conceptual ranking, she asserts that the overall pattern of variation in services differs between two serv-
ices, and this difference is affected by the intensity of demand among those who want provisions. This means that, in accumulation services, various public demands are generally constrained due to the powerful position of capital. However, among the legitimation services, public demands for the provision of services are influenced by income, life-cycle and other ecological factors.

On the basis of this result, she asserts that "this difference is not purely serendipitous, rather these differences in expenditures are likely to be reflective of two political processes at work in the provision of services' (Staeheili, 1989, p. 244). She demonstrates the validity of the materialist approach in the high levels of abstraction which rationalizes the ad hoc explanation of the pattern of public service provision, furthermore she illustrates the general mechanism of the political processes at both national and local levels.

Although this approach has been directly adapted to and developed in totalizing the features of municipal expenditure pattern in prewar Japan, it failed to cope adequately with difference and complexity of the local specificity. Here, I would acknowledge the power of this structure-oriented typed materialist approach to the state, which helps us to make clear a more general coherent pattern of service expenditure, clarify the causal relationship between the observable data and the underlying process that creates them. At the same time, it is also necessary to pay closer attention to many variations within this expenditure pattern of each service. In the next chapter, I introduce an approach, which is more sensitive to the local variation and is able to explain events in particular places at particular points in time.

III. QUANTITATIVE ANALYSIS OF JAPANESE URBAN FINANCE USING MUNICIPAL EXPENDITURE DATA

1. Spatial analysis of the provision of public services

It is ironic that geography of public services has been playing down the importance of a simple description of the spatial pattern of public services, while a number of political scientists actively engage in studies of the spatial aspects of political urban issues. Here, I shall identify some studies done by political scientists which pay attention to the geographical determinants in attempting to explain the difference of levels of public service provision. They have started to pay attention to the approaches developed by urban geographers in studies of urban systems, and induce some assumptions from these urban geographical approaches using statistical methods by calculating multi-variables of each urban setting.

In other words, this type of study may originally be regarded as the analysis of public resource allocation in the West whose approach correlates environmental, socio-economic, and political characteristics of local jurisdictions with levels of public expenditure or service provision (Burnett, 1985). These aggregate-area (output) studies have been refined and sophisticated by Sharpe and Newton (1984), after their critical appreciation of the results of the multi-collinearity method. Newton (1984) has already suggested that conventional attempts to explain the variations in public expenditures on the part of local authorities have not proved successful. Various statistical techniques and approaches were used, as he argued, through correlation and regression analysis, analysis of variance, and various forms of hierarchical cluster analysis, but all delivered very little in the way of statistically and substantively significant results.

Consequently, Newton advocates the simplest method which entails nothing more complicated than ranking authorities from the highest to the lower per capita spenders of public services, referring to the results of urban system studies. He tries to explain the levels of expenditure on different services in terms of (1) a city's role as a service center within the national urban hierarchy, and (2) its location and economic role. Responding to his idea, two Japanese political scientists, Akuto and Sato (1985), succeeded well in explaining the pattern of municipal expenditures in terms of sociodemographic and political indicators among all
Japanese cities in the year of 1975. They pointed out key geographical factors which apparently explain variation in service spending by local authorities.

In the following section, I will attempt to examine quantitatively the distribution of public service activities in municipal government and the patterns of municipal government intervention. In so doing, I attempt to show the importance of explanation of local specific variation linked to the general structure and process of intervention, and demonstrate causal relationships between them. Before beginning analysis, it is necessary to show, in terms of realist notions, how the history of municipal government intervention is created by people and place interpreting structures and making context, explaining how contexts can be changed, and how structures can be changed.

2. Current debate in the historical study of public service in Japan

Unfortunately, Japanese geographers have contributed very little to guide the orientation of this field, even though some urban geographers have given attention to the historical process of urbanization. As Yamada (1979) has reported on the history of research into urban geography, there is still no exchange of views or cooperation with other disciplines such as history or political science. In contrast, the study of public service has now entered on a new phase in the abundant literature of the modern urban history in Japan. Especially, it aims to clarify the moment of historical formation of urban politics through the analysis of urban finance. In this argument, it is worth noting that provision of public service is regarded as playing one of the key roles in understanding the establishment of modern Japanese urbanization.

The central object within the historical studies of public service had been focused on the elucidation of center-local relationships of the state which was characterized by confrontation and subordination between the central and local states. Conventional approaches had tended to stress the relative absence of public service provision due to the limited financial capacities of municipal government which was subordinated to the central government. In the academic effort of connecting the urban evolution with the development of Japanese capitalism, Miyamoto (1980), relying on this traditional perspective, proposed two evolutionary stages of Japanese urban process. He argued that the primary stage of urbanization, from 1920 to 1940, was characterized by the arbitrary capitalist development of urban space for capital's own convenience, and that the centralization of the control over financial resources had brought upon both poor outcomes in urban politics and induced the crisis of urban finance.

This accepted analysis of center-local relations is criticized by Muramatsu (1986). He casts doubt on this interpretation and argues the need for fundamental reexamination of this relation. He proposes the lateral competition model instead of a traditional vertical control model which stresses more local governments' initiative and interaction within local policy-making. Some studies, reflecting this view, have also come to evaluate urban management in prewar days. That is, the provision of public service had developed rapidly in most urban areas through the management of municipal government. Simultaneous with this change, new thinking about intergovernmental relations has developed and especially, in the studies of urban finance, internal structure and inter-government financial variation have come to be explored.

For instance, Mochida (1981) elucidates the specific law of motion within urban finance through the analysis of the long-term transition of municipal expenditures. The history of urban finance during the prewar days is characterized by two upward swings of quantitative expansion of municipal expenditures. The former period falls in the time after the Russo-Japanese War of 1904-5, when the two largest cities of Tokyo and Osaka contributed significantly to the expansion of municipal expenditure; the latter period is in 1924-1927 after the post-World War I boom.

Mochida suggests that the mechanism of these expansions can explained as the workings of a series of macro-economic regulations a-
against the unfavorable balance of international payments. And he also mentions the great potentiality of the six largest cities—the so called “the six major metropolitan areas”, Tokyo, Osaka, Nagoya, Kyoto, Kobe, and Yokohama, which acquired public services and goods using their strong political and economic forces. Moreover, in his later study, Mochida (1984) develops this fact-finding to propose the term transitional swing, which works like a pendulum between centralization and decentralization in the course of the generative process of local governance institutions in Japan.

First, he takes note of the process of the establishment of the division of finance between central and local government, through the municipal subsumption of the principle of market economy. Secondly: in respect to his first observation, Mochida highlights the need for closer attention to urban planning which may generate the driving force of the establishment of urban finance, through competitive rivalry for acquisition and establishment of public works between “the six major metropolitan areas.” Third: he attempts to understand the municipalization of public works in “the six major metropolitan areas” as a process of influential penetration into the regulation and control of the national business cycle.

While his main object is to clarify the principal reason for the institutional development of urban finance, he recognizes the significant role of urban finance which has contributed to Japanese urban spatial development through the provision of public goods and services. His successful identification of the features of urban development under the periodic rhythms of prewar Japanese capitalism seems particularly to be a meaningful finding.

There was also a growing concern over the role of urban planning associated with urban policy formulation at that time. Yet Mochida already mentioned the significance of its role, in which the traditional approach to urban planning was used to indicate the authorized administration of the central government over the municipal policies in urban planning. Without investigating actual conditions among individual urban planning activities, traditional studies only stressed the incapability of carrying out effective and total urban planning. The recent works of Nakamura (1980, 1982) breaks down this tradition and claim that the policy formulation of urban planning, which was enforced for the first time in 1919, marked an epoch in the history of Japanese legislation to alleviate at least the traditional bureaucratic sectionalism through the establishment of co-existent institutions of consultation and execution of urban planning policy.

After World War I, disorderly urbanization due to the postwar economic prosperity was experienced for the first time. Under this confused urban development, effective state interventions to control this development such as urban planning were strongly demanded. In this sense, the Urban Planning Act of 1919 was the first legislation to regulate urban development by the initiative of technocrats in the Ministry of Interior and “the six major metropolitan areas” governments by introducing local legislation different from the existing modes of administration. The disastrous Kanto Earthquake of 1923 ironically facilitated implementation of substantial urban planning through the Reconstruction Works of Tokyo and Yokohama. Eventually this epoch-making project demonstrated the efficiency of this legislation. After that, several urban planning projects came to be implemented under the leadership of urban technocrats, and Mochida characterizes this progress by the term nationwide movement of urban public investments.

In the absence of common understanding or established viewpoints in this discipline, it is undoubtedly an instructive approach which highlights the moment of historical formation of urban politics through the analysis of urban finance. This fact-finding is helpful in understanding the overall features of prewar Japanese municipal government intervention in urban development. Hence, the analysis of inter-authority variations holds the key to explaining the difference in expenditures in order to explicate the structural characteristics and process of public service provision, since the importance of specific local variance of financial structure at a low level of abstraction has already been recognized. For example, Sakamoto (1984) claims, in his historical analysis of
urban finance, the need for comparative studies among individual municipalities based on the efforts of classifying cities in terms of socio-ecological labelling such as political administrative cities, military cities, historical origin cities, etc. At a low level of abstraction, it is necessary to explain, in the next step, the localized phenomena of municipal government intervention.

3. Capital formation

Before examining the general trend of municipal government intervention, that is, municipal activities in the provision of public services and goods, I must refer to capital formation in prewar days, since this index seems to be a good indicator of identifying the general characteristics of municipal activities in conjunction with the construction of the urban built environment. Fortunately, a good illustration of capital formation since 1868 is shown by Emi (1971).

In his estimation, (gross domestic fixed) capital formation is divided, according to the economic units concerned, into government and private capital formation and, according to types of investment, into construction, producers’ durable equipment, and inventory. It is also divided in the government sector into central and local governments. While combining various methods of estimating each economic unit, capital formation by government is arrived at by totaling expenditures for capital formation6. His estimation, therefore, shows us a good illustration of the position and share of local government activities within the long term capital formation in Japan.

First, I begin by paying attention to the share between government and private sectors. For convenience in the analysis below, I exclude the accounts of military sector. Figure 1 shows the long term variation of share within each capital formation. Except for both periods of World Wars I and II, the government shares range accordingly from 25 to 40 percent, and the share of private sector varies from 75 to 60 percent. The period in which the government share indicates over 40 percent falls in years around 1910 and the late 1920s, during which was experienced either economic depressions or stagnation. This tendency means a higher weight of governmental public investment in order to create effective demands which facilitate private investment. In contrast, the private sector’s capital formation dominates the share in the period around 1920 and the late 1930s, which are both strongly related with the economic booms either within or after wartime.

Two other significant findings are shown in Fig. 2. First, the existence of a time lag between peaks of the share in both sectors, when the government share follows the peak of the private sector a few years after; second, the relative smoothness of fluctuation curves of varia-

![Figure 1](source: Emi (1971).)

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tion in government sectors compared with the private one. These findings are associated with the time-pattern differences between private capital formation with the initiative of the investment of producer durable equipment and public investment which is mainly characterized by social overhead capital. Consequently, capital formation within the government sector compensates for the relatively low level of capital formation in the private sector, and operates to moderate the relatively acute decrease of the level of private activity.

Concerning the relation between center-local governments, Fig. 1 shows that capital formation within the local government sector generally occupies nearly two thirds of that of the total government sector. In his summary, Emi (1971) demonstrates that, in the period of the observations, non-military capital formation in the government sector is characterized by four leading investments such as public buildings (mainly schools), public works (water, harbors, riparian works, roads, bridges), transportation mainly consisting of construction of national railways, and public utilities such as the provision of electricity and gas in the local government sector.

4. Macro-theoretical explanation of expenditure pattern

Relying on these findings about the positions and significance of the activities within the local government sector, the analysis then goes forward to examine the structures of municipal expenditure which mainly focuses on the analysis of several leading investments as described above.

Table 1 shows the trend of shares in municipal expenditure by purpose. Five large expenditures are found: education, hygiene, electric and gas works, offices, and civil engineering. Including the expenditure for public debt which continues to occupy the largest share among all purposes, these purposes of expenditure are considered to constitute the basic structure of municipal expenditure.

In order to demonstrate the general characteristics of inter-purpose relationships of expenditure and their correlation with several socio-economic indicators, correlation analysis is examined among each purpose of expenditure of ten years' average in the period of 1926 to 1935. This shows that the higher the degree of education expenditure, the lower the degree of both civil engineering and hygiene (see Table 2). In conjunction with the correlation with some socio-economic indicators, making use of the census data of 1930, relatively weak correlations are found except for five significant correlations (see Table 3).

According to these results, the commercial cities spent a lot on education and little on hygiene. On the other hand, industrial and transportation cities are negatively correlated...
with education expenditure, and the cities characterized as local administrative centers are low spenders on civil engineering. It is also demonstrated that the rate of population increase (1903-1940) is correlated with the per capita expenditure for civil engineering \((r = 0.29)\) and negatively with that for education \((r = -0.45)\).

Generally, education, civil engineering, and hygiene expenditures are correlated with a rather wide range of socio-economic variables, and play an important role in municipal budget. Additionally, variations other than share also tell a significant feature of this municipal budgetary structure. Figures 3 and 4 illustrate long-term trends of the coefficient of variation of per capita expenditure for each purpose among all cities in prewar Japan.

As Staeheli (1989) has suggested, the coefficient of variation expresses the standard deviation as a percentage of the mean of per capita expenditure, and this allows one to describe the pattern of expenditure in general. As is shown in Figs. 3 and 4, the pattern of expenditure is quite striking, that is, the coefficients of variation for education, office, and police expenditure are quite low and exhibit less variations. Conversely, those for urban planning, electric and gas works, social works, and encouragement of industries expenditures score high with
large fluctuations and began to settle down by the late 1930s, except for electric and gas works. The remaining three coefficients of civil engineering, hygiene, and public debt fairly fluctuate in relatively higher values than those of education for instance.

Three different patterns of expenditure among municipal authorities are found. In particular, education and office expenditure exhibit little variation and are not located in the place in the accumulation-legitimation continuum that Staeheli had anticipated. This is because the primary educational system was uniformed institutionalized as early as 1872, and every local government unit was authorized to be responsible for primary educational
service. Therefore, there is a comparative lack of options in the provision of educational services, so there is likely to be lower variation.

Office expenditure also continues at a low level of variation because of its constant provision under the demands of routine administrative affairs. The reason for the relative higher variation in police protection as compared to education and offices may be due to the absence of metropolitan ("the six major metropolitan areas") police authority which is instead under the prefectural jurisdiction.

In contrast, patterns of expenditure with greater variation have two different characteristics between the former of electric and gas works, and the latter of urban planning, social works and encouragement of industries. The former variation of electric and gas works continues to be great, and is influenced a lot by the structure of municipal expenditure.

Figure 5 shows the distribution of municipal authorities which managed either municipal supply of electricity, gas, municipal streetcars, or buses. Twenty seven authorities undertook...
some of these municipal enterprises, which account for only twenty-five percent of the total 107 municipal authorities. This is one reason for an increase in the values of coefficients of variation. In addition, the relatively huge amounts of expenditure for those purposes contribute to this high score, especially in the case of managing electric supply and running streetcars.

The proportional black circles in Fig. 5 represent the percent share of expenditure for electric and gas supply and streetcar in the grand total of municipal expenditure. These shares are calculated as two years' average of 1938 to 1939 values. Kobe, Sendai, Kanazawa, Shizuoka, and Osaka spent over one fourth of total expenditures solely on electric and gas works and running streetcars. The high spenders for these purposes exert no less influence on the structure of municipal finance through the municipal subsumption of market economy principle as MOCHIDA (1984) has suggested. This is another reason for the great variation in this expenditure.

How might we interpret this outcome from the concept of public services on a legitimation-accumulation continuum as presented by STAEBELI (1986)? For instance, she argues that legitimation services are generally provided for the benefit of the general "classless" public; in other words, for the preservation of the mass loyalty, and it is common for small groups and individuals to be involved in the decision-making process. She also observes that economic, cultural, and other social conditions in the various regions of the country also contribute to variation in demand for legitimation without control from the higher levels.

Considering the decision-making process of the provisions for electric and gas supply and running of streetcars, there were a number of debates over defining the motivating force in the course of this provision of services. Some assert that these municipal provisions should not be profitable but beneficial for citizens in order to mitigate the private monopoly in the provision for those public utilities. It is generally agreed, however, that the primary force for provision is driven more by the demand for profit which provides municipal authorities with more available resources (FUJITANI, 1944).

It is then somewhat difficult to adapt the notion in STAEBELI's (1989) analysis of political processes directly to the prewar Japanese context, because demands for such provision of services did not emerge through involving small groups and individuals. Rather, in fact, some progressive urban bureaucrats substituted in these roles. Especially, Hajime SEKI, mayor of Osaka from 1923 to 1935 (deputy mayor from 1914), is worthy of note in his achievements within the urban political processes for legitimation.

The reason for this evaluation of his achievements depends mainly on his active engagement in the implementation of social policies. In order to create a city comfortable to live in, he acted as a pioneer in carrying out a series of social policies into effect for the benefit of the public. Although some observers point out that his real purpose was intended to root out the circulation of pernicious opinions in the public, he had something in view to ameliorate the living conditions of general working people in order to preserve their civic loyalty (TAKAYOSE, 1990; SHIBAMURA, 1989; KAWASE, 1985).

In association with this issue, variation in expenditure for social works also displays an interesting trend (see Fig. 4). This coefficient of variation tends to decrease in value, and in particular, I must pay attention to the striking decline after 1918. This decline reflects the real proliferation of social policies which had started in the year 1919 after a series of civil disorders such as the 1918 Rice Riot, a nationwide mass protest against the steep rise of rice price. In particular, the governments of the six largest cities, "the six major metropolitan areas", took the initiative to enforce a wide range of social policies. In the course of this policy formulation, Mayor SEKI and other progressive municipal bureaucrats played an important role.

During the decade of the 1920s, the capitalist contradictions in urban Japan such as housing shortages and deterioration of living conditions under rapid urbanization exploded for the first time in many ways. Hence, various kinds of social policy formulation were to emerge simultaneously to ease the arising public tension.
during the decade of the 1920s: public housing, municipal markets, public inns, public nurseries, public baths, employment agencies, public pawnshops, public restaurants, settlement houses, and other facilities for social works. This proliferation corresponds with the decrease of coefficients of variation in social work expenditure after 1918.

According to her analysis, STAEHELI (1989) anticipates that the services for social well-being generally serve as those of legitimation. In this Japanese case, however, social works expenditure exhibits a much lower variation than expected in the decade of the 1930s. This outcome seems to be better explained in terms of uniform Japanese local policy formulation. Once a policy was implemented, each government would adopt it in the same manner due largely to standardized guidance by the higher levels of government. In addition, public participation in this policy-making was also weak; therefore, there was little chance of generating an uneven spread of these services during the period of this observation.

The variation of urban planning expenditure as displayed in Fig. 3 also requires specific comment. Since this trend of variation also exhibits a striking decline in the 1930s, it allows one to consider changes in the pattern of services in this expenditure. Being more complicated than the former instance of social works, the expenditure for urban planning was mainly consumed in the construction of streets, water works, sewerage, and arrangement of town lots on one hand (generally regarded as accumulation services), and on legitimation services of park and cemetery construction, on the other. In addition, the value of this coefficient still scores relatively high-nearly 200 percent in 1940. Although this result indicates the immaturity of the policy-making process of urban planning and its consumption of a relatively small proportion of the municipal budget at that time, it is a good place to argue about its consequences generated in the debate on policy formulation under the growing concern for the role of urban planning in recent Japanese academism.

As already argued concerning the issues of urban planning, FOGLESONG (1986) recognizes two contradictions arising under capitalist urbanization. It is important here that the role of state in socializing control of urban space in order to maintain capitalism should embrace the other role of maintaining public loyalty to the state. He terms it the capitalist-democracy contradiction; and only planners, he argues, can solve this contradiction.

On the other hand, Japanese scholars stress the important role of urban bureaucrats in implementing effective policies of urban planning. Without holding a common analytical framework, both approaches incidentally draw attention to the important status of planners in the course of state intervention in urban development. In order to consider the importance of policy-making in the history of Japanese urban development despite its poor outcome, one must examine in detail the concrete achievements of this policy.

5. Locality-specific explanation of expenditure pattern

Figure 6 shows a distribution in which each circle illustrates the total expenditures for urban planning projects, and Fig. 7 shows their duration and lists the content of individual urban planning projects within 66 cities which had implemented these projects by 1939 (among 107 cities selected in this study). In both figures, it is clearly indicated that "the six major metropolitan areas" are superior in both their period of starting, variety of projects, and their huge expense for these projects. Above all, urban planning expenditures in Tokyo and Osaka are conspicuous even among the other "six major metropolitan areas". It is also noted that the municipal authorities located in North-East Japan were not active in carrying out urban planning.

In association with the date of application of these projects, three stages can be identified in Fig. 7. In the first stage during the early 1920s, after the application of the Urban Planning Act of 1919 to "the six major metropolitan areas" alone, these projects are characterized by the initiative of metropolitan governments. Particularly due to the commencement of reconstruction works after the Kanto Earthquake of 1923, Tokyo and Yokohama simultaneously
engaged in construction of parks, readjustment of town lots, and excavations of canals, besides the construction and widening of streets according to their reconstruction schemes.

In the second stage during the late 1920s, several regional metropolises like Sendai, Kanazawa, Okayama, Hiroshima etc., inaugurated for the most part construction of street networks three years after application of the Urban Planning Act to these cities. It is also worth noting the case of Osaka with its construction of a main boulevard, which was accompanied by subways running under the boulevard.

The third stage is characterized by the simultaneous participation of many local municipal authorities in the years 1933–1934. As Fig. 7 shows, many authorities only engaged in projects of street construction, since the arrangement of street networks or widening of the existing streets had been urgently demanded by growing intra-city transportation. Unfortunately, they could not realize nor develop the full range of urban planning projects, mainly because of the later severe budget cuts.

Figure 6. Expenditure for urban planning by 1939 (current prices)
Note: See text.
Source: The Tokyo Institute for Municipal Research: Nippon Toshi Nenkan (Urban Yearbook of Japan), No. 8, 1938.
Figure 7. List of projects for urban planning by 1940

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- RI: river conservation
- TE: tide embankment
- SW: sewerage
- S: street construction
- W: water supply
- A: airport construction
- CA: readjustment of town lot
- CA: cannal construction
- CE: cemetery construction
- SB: subway construction
- SC: streetcar track construction

Source: See Figure 6.
under the restrictive wartime finance after the breakout of the Sino-Japanese War of 1937.

The proliferation of these urban planning projects is clearly demonstrated in Fig. 7, which is understood in terms of the nationwide movement of urban public investment as Mochida (1984) has noted. Undoubtedly, we should be careful of exaggerating the outcome of these projects. In some cities like Tokyo, Yokohama, Osaka, Kyoto and Toyama, these projects were actually regarded as urban reform projects larger than ever before. Thus, we have to draw attention to certain aspects of results of such constructions of city-wide street networks or the substantial amount of adjustments of town lots in the suburbs, which framed the basic spatial structure of the present cities (Ishida, 1987).

In order to clarify in more detail the locality-specific variations in urban planning projects, I attempt to compare individual amounts of per capita municipal bond issues with the population sizes of each city (see Fig. 8). Generally, municipal bonds are used to finance development and construction schemes; this item can be regarded as a substitute for urban planning expenditure. In addition, and more importantly, this item is recorded with the detailed statement of each purpose of issue and involves a wider range of construction works than those of urban planning. In the scattergram of Fig. 8, seven groups are obtained by using cluster analysis with two variables of population and per capita municipal bond. The cities which are located above the regression line show a relatively higher bond issued compared with their city sizes, and vice versa for those located in the lower side. Here, I attempt to focus on the four groups of A, B, C, and D.

Group A, which is by far the most prominent in population size, consists of “the six major metropolitan areas” with much higher values per capita of issued bonds. These higher values are heavily determined not only by the larger bond issues for electric and gas works, but also for the three major expenditures of education, hygiene, and civil engineering. This outcome exactly reflects the existence of consistent and great needs for metropolitan local services.

Meanwhile, groups B and C both include the regional metropolis and the industrial cities. They differ in pattern and amounts of their issued bonds. The lower spenders in group B include major military cities such as Hiroshima, Kure, Sasebo (except Yokosuka), in which the initiative of investment for water works and street constructions are in the hands of the central government in conjunction with the development of military bases. One of the leading industrial cities, Yahata, is also noted for her lower bond issues, which are partly due to the prior heavy investment in the built environment by the government-managed steel company there.

In contrast, the major regional metropolis of Fukuoka, Sendai, Sapporo, Nagasaki, Kumamoto (except Hiroshima), and the major port cities of Moji and Shimonoseki belong to group B. Except for the top spender in group B, Kanazawa, which disproportionately spent on electric and gas works due to the extraordinary spent on electric and gas works due to the extraordinary high purchasing price of private electric and gas companies, the bonds issued are relatively numerous for civil engineering and hygiene.

Group D involves six local center cities with higher expenses for public bonds despite their small population size. These high spenders seem to respond to specific local demands, for instance, Imabari, Shimizu, and Uwajima issued bonds for harbor improvement works. On the other hand Numazu spent for its budget on
construction works in districts destroyed by fire. Kushiro and Tsu consumed their bonds for extension of the water supply. These temporary large investments are considered to increase the amount of public bonds.

Other groups (E, F, and G) include most local free-standing cities, which are characterized by lower activities in the construction of the urban built environment except for the consistent expenses for education.

This outcome suggests firstly that the general features of per capita issued bonds proportionately increase with population size. It allows us to assert that the position of an authority in the urban hierarchy appears to have an important effect upon the expenditures. Secondly, local specific conditions also hold the key to explaining the extreme variations in issued bonds. For instance, Tokyo, Yokohama, Kawasaki, Kanazawa, and Numazu suffered most from big fires and had larger planning expenditures. This helps us to acknowledge that many factors do not work in a unidimensional way across all authorities.

Here, I need to posit a locationally-based explanation in relation to municipal expenditures. The next analysis responds exactly to the current demand for comparative studies among individual municipalities based on the efforts to classify cities in terms of ecological factors among Japanese researchers in historical urban finance.

The following analysis, using three major expenditures of education, hygiene, and civil engineering (this item includes urban planning expenditure), attempts to clarify the historical pattern and variations of these three expenditures. Since the other significant expenditures on electric and gas works, as has already been demonstrated, generate deviation, this item had best be omitted in the following analysis. The shares of the three expenditures are individually calculated in the selected six periods from 1908 to 1935 among 68 authorities which had

A: Tokyo, Osaka
B: Sapporo, Hakodate, Otaru, Yokohama, Niigata, Nagoya, Sakai, Kobe, Okayama, Hiroshima, Moji, Kokura, Nagasaki
C: Sendai, Shizuoka, Kyoto, Shimonoseki, Fukuoka, Sasebo
D: Aomori, Yamagata, Takasaki, Yokusuka, Takaoka, Kanazawa, Nagano, Gifu, Hamamatsu, Toyohashi, Tsu, Yokkaichi, Himeji, Nara, Wakayama, Tottori, Matsue, Onomichi, Tokushima, Takamatsu, Marugame, Matsuyama, Kochi, Kure, Oita
E: Hirosaki, Morioka, Akita, Fukushima, Mito, Utsunomiya, Nagaoka, Takada, Fukui, Kofu, Matsumoto, Otsu, Saga, Kumamoto, Kagoshima
F: Yonezawa, Wakamatsu (in Fukushima Pref.), Maebashi, Toyama, Ujiyamada, Kure, Naha

Figure 9. Transition of the position of municipal authorities according to the types of expenditure pattern
Note: Three cities are omitted in 1908, and two cities are omitted in 1930
Source: See Figure 3.
been organized as municipalities by 1913.

By calculation using cluster analysis, after multiplying six periods by 68 authorities, 408 individual expenditure patterns can be summed up with three clusters as in Fig. 9: the cluster of prominent expenses for education, that of hygiene, and that of balanced expenses between the three expenditures (I shall call these the education type, hygiene type and balanced type). Next the cross table between periods and types was obtained, and each city, located in each column of this table, shifts its position in the table according to the passage of time.

Several transitional patterns are obtained. One would expect that local free-standing cities generally continue to be educational types in every period except for one or two times’ temporary shifts toward the hygiene type, which indicates the indispensable construction of water works. Fifteen authorities fall into this type (E in Fig. 9), and another seven authorities

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**Figure 10. Distribution of three groups of authorities in balanced-type expenditure**

Notes: Largest square corresponds to the group A in Figure 9. Middle-sized square corresponds to the group B in Figure 9. Smallest square corresponds to the group C in Figure 9.

Source: See Figure 3.
did not experience any type other than that of education (F in Fig. 9).

There are also twenty-five authorities indicated which have experienced a similar tendency to the above-mentioned group (D in Fig. 9). However, in this group including fifteen prefectural capitals, nearly half of them finally, at the later end of this observation in 1935, shifted toward the balanced type.

The remaining twenty-one authorities, whose distributions are illustrated in Fig. 10, tell us a significant fact. The two largest squares of Tokyo and Osaka imply that they are located throughout in the same balanced type position except one-time shift of Osaka in 1918 (A in Fig. 9). The thirteen middle-sized squares show the distribution of authorities which started in the hygiene type and later shifted to the balanced type (B in Fig. 9). Three of "the six major metropolitan areas" of Nagoya, Kobe, and Yokohama are included in this type. In addition, the regional metropolis of Sapporo and Hiroshima, major port cities of Otaru, Hakodate, Niigata, Moji, and Nagasaki also fall into this type.

The six smallest squares correspond to the authorities which experienced once or twice the hygiene type after going through the education type at the beginning, then finally shifted to the balanced type (C in Fig. 9). Among them are included one of "the six major metropolitan areas", Kyoto, and the regional metropolis of Sendai and Fukuoka.

At this level of explanation, it appears that the pattern of variation in expenditure can in one way be interpreted by the hierarchical ranking of cities in the overall urban system, and in another way be explained by specific local factors. In Fig. 10, the new constituent element of the Japanese urban system developing after the Meiji era, which Sugiyura (1978) observed as the foreign trade port city, the city for the reclamation of Hokkaido, the naval city and the industrial city, such as Sapporo, Hakodate, Otaru, Niigata, Shimonoseki, Moji, and Sasebo plays an important role in developing the urban built environment by municipal initiative. However, the naval cities of Yokosuka, Kure, and the industrial city of Yahata took less initiative in public service provision than expected in the urban hierarchy due to the above-mentioned specific local factors. Secondly, four regional metropolises out of five, as observed in the study of Abe (1984), intervene more actively and diversely to organize the modern urban built environment.

According to the former interpretation by the hierarchical ranking, Table 4 presents the systematic evidence for this interpretation. It shows how much more than average "the six major metropolitan areas" spent on municipal affairs. The table also shows how little the prefectural capital cities (in fact, 22 out of 24 are prefectural capital cities), local free-standing or suburban cities, local commercial and light industrial cities spent, but rather how much is spent by the regional metropolis and port cities. The crucial factor explaining the

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<th>Type of authority</th>
<th>Numbers of cities</th>
<th>Per capita expenditure</th>
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<td>6</td>
<td>48.2</td>
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<td>Regional metropolis</td>
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<td>25.9</td>
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<td>Prefectural capital cities</td>
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<td>16.2</td>
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<tr>
<td>Local free-standing or suburban cities</td>
<td>10</td>
<td>16.5</td>
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<tr>
<td>Local commercial cities</td>
<td>28</td>
<td>15.9</td>
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<tr>
<td>Light industrial cities</td>
<td>13</td>
<td>16.3</td>
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<td>Port cities</td>
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<td>22.2</td>
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<td>Heavy industrial or naval cities</td>
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Note: Population according to the Census of 1935. The type of authority is classified by the Census of 1930. In this classification, regional metropolises are Sapporo, Sendai, Kanazawa, Hiroshima, Fukuoka. Light industrial cities are Ashikaga, Maebashi, Kiryu, Hachioji, Takaoka, Matsumoto, Ogaki, Toyohashi, Ichinomiya, Seto, Yokkaichi, Sakai, Imabari. Heavy industrial or naval cities are Muroran, Yokosuka, Kawasaki, Amagasaki, Kure, Kokura, Omuta, Yahata, Tobata, Nagasaki, Sasebo. Port cities are Hakodate, Otaru, Kushiro, Aomori, Shimizu, Shimonoseki, Ube, Moji, Wakamatsu.

Source: See Figure 3.
moderate value of heavy industrial cities owes much to the dominant central government and big monopoly private enterprise intervention to the development of these cities.

IV. CONCLUDING REMARKS

Specific features of Japanese urban politics at the time can be well explained according to the outcome of the analysis of municipal expenditure. In order to accommodate capitalist accumulation, local governments started to invest at first in educational facilities. This investment is thought to have ensured the reproduction of the labor force at the primary stage of the development of Japanese capitalism in the Meiji era. However, the investment was not aimed at the outset of modernization in Japan to the improvement and development of urban residential environments. The conventional approach tended to be hasty in blaming this backwardness of provision, and so it was relatively unsuccessful in explaining features of prewar urban politics; and the current research frontiers concerning public service provision by municipal initiative has since been trying to overcome this kind of backwardness (TAMAI, 1986). In this context, the examination of the pattern of municipal expenditures by relation to the accumulation-legitimation continuum is significant in assessing Japanese urban politics in the prewar days, in terms of a new conceptual framework different from the conventional one.

In her argument, STAHELI (1989) locates service for education in the middle of the continuum, and locates those for hygiene and civil engineering on the accumulation end of the continuum. In this analysis, on the other hand, the former service is located in the accumulation end and the latter two services are located in the middle. This difference does not spell the irrelevancy of her analytical framework but shows the specific characteristics of public service provision in the primary stage of Japanese capitalism.

The relatively high coefficient of variation in services for hygiene and civil engineering was not produced by efforts to maintain legitimacy \( \text{viz à viz} \) the noncapitalist ordinary mass. Rather, this pattern was produced by the priority allocation resources for provision of drinking water and harbor construction to the port cities, for which the state keenly required urban development as the motive power that facilitated the development of Japanese industries and overseas trade. In the Japanese urban hierarchical system, this type of city emerged primarily and figured out as the new constituent element of the traditional urban system. At that time, high levels of investment in these services were thought to be indispensable to those cities. At the same time, it could be pointed out by way of a different interpretation that these services intended in one way to maintain the legitimacy for the traditional urban notables. But it is clear that this was not motivated by an intention to maintain a real sense of city-wide civic loyalty. This is also thought to be a peculiar characteristics and historical restriction to the development of Japanese public service provision.

On the other hand, the importance of the active investment toward the provision of public service in cities which now have become regional metropolis must also be recognized. Being different from the port cities in their historical origin, this type of city had been growing as the politically and economically primate city during the pre-modern feudal era, and had a strong demand for exhibiting the historical legacy of their regional primacy in the urban development after the Meiji Restoration. This demand was revealed by the relatively vital participation in the municipal enterprises especially of provision of electricity and gas supply responding to the strong desire to maintain the legitimacy of urban notables. Thus, several regional metropolis contribute to making the coefficient of variation higher.

By these characteristics, the energetic execution of municipal enterprise in “the six major metropolitan areas” was remarkable yet. The real power of “the six major metropolitan areas” was exhibited in the face of rapid urban growth after World War I; at the same time, a number of urban social policies emerged and addressed the significance of the real meaning of civic loyalty. In this trend, some progressive urban bureaucrats in “the six major metropolitan
areas" actively developed the newly introduced techniques of social work and urban planning and carried out a new style of urban policy formulation. The accumulation of these projects gave higher values to the coefficient of variance at the beginning of this policy's execution in the 1920s.

Current debate in the urban study of Japan partly concentrates on the issue of whether the real intention of this progressiveness addressed the real meaning of civic loyalty or not, and mutual agreement in this issue has not been attained. However, the practical pursuit of the meaning of civic loyalty aside, the ability of urban bureaucrats had been ironically exhibited not in Japan but in the projects of colonial town planning abroad especially in Manchuria. Lack of resources due to the restricted wartime economy of also prevented the progress of urban policy which had proceeded little by little to become routine work.

On the other hand, the decrease of coefficient of variation in the late 1930s can also be pointed out. This might be the outcome of the uniform diffusion of the set of urban policies under the dominance of the system of bureaucracy initiative without the real participation of the urban public. In this sense, STAEBELI's (1989) conceptual framework does not seem to be adaptable for understanding of the prewar Japanese case, but rather seems useful for distinguishing the specific features of Japanese urban finance. This tendency is also true for the present uniform local governance, which is deeply characterized by the grants-in-aid policy of the central government.

In the arena of urban politics, materialist theory of the state provides a means for rationalizing the pattern of municipal government expenditure in terms of two elements of policy formulations in the capitalist city. It is argued, in this debate, that urban planning is thought to be the best policy formulation for facilitating capital accumulation in the face of two contradictions. Therefore, the implication of a materialist theory of state might be applied in a narrow sense to the prewar Japanese case, since a group of progressive urban bureaucrats were conscious of two contradictions within the capitalist urban development, and tried to promote the development of the real sense of urban planning. At the same time, even if the outcome of the several projects of urban planning were actually unsuccessful during the wartime of the late 1930s, there is also no denying fact that, as FOGLESONG (1986, p. 235) claims, "one can understand the history of urban planning in all its rich complexity, with appreciation for why urban planning in a capitalist society is both necessary and impossible".

Lastly, how can we locate the relevance of this approach within the newly emerging political economy approach in human geography? Seen especially from the structuralist eyes, the definite emphasis in urban studies is set on the pursuit of general production of the built environment. By this effort, the specification of causality lays in the pursuit of conflicting class interests. Ironically, the conventional approach to Japanese urban studies had basically depended on the underlying Marxist assumption which led it to present the urban past in terms of a dichotomy between a politically and economically dominant class and the working-class masses.

This perspective has shared the view of the following elements: labor movement; urban popular movement of the lower classes; and municipal politics (NARITA et al., 1989). The basic approach and the character of municipal politics in the 1930s are vigorously discussed with reference to the people of the lower strata and in relation to social tension between the people. Through these debates, the urban historical study of class relations was developed earlier than that in the West. However, this kind of academic tradition has not found it easy to assert its validity in all of these historical changes within the debate.

It is argued that one of the reasons for this predicament is that they laid too much stress on the existence of class conflict and the excessive estimation of the reality of working-class consciousness. Rather, taking into consideration the immaturity of urban working class society in this period of observation, I have tried to add new insight into the behavior of the political elite especially in municipal authority, as they struggled to solve the two contradicting natures of capitalist urban de-
development. While this part of this analysis seems in fact to be insufficient, I highlight, first of all, the pattern of concrete products of municipal government projects rather than the behavior of municipal bureaucrats through the empirical analysis of municipal government expenditure. This analysis attempts to compensate for the dearth of quantitative study of urban finance in prewar Japan.

The research frontiers of human geography have begun to shift, to discuss, for instance, the reality of post-modern society. Cooke (1990, p. 334) illustrates this situation arguing that "the rise of neoliberal political power in the 1980s has dealt a severe blow to the theory of the modern city as a system dominated collective consumption issues." At this moment, we are faced by the urgent task of overcoming the inactivity of theoretical debate in the human geography of Japan identified by Matsubara (1990), and of producing solid quantities of sophisticated empirical analysis.

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Notes

1) I admit that this view might be over-simplified to endure sophisticated criticism. Pinch (1985) argued more precisely about the relevancy of the geographical (spatial) viewpoint on the study of collective consumption. He proposes that three geographical factors contribute to the debate of collective consumption from the spatial point of view. First there is the phenomenon of jurisdictional partitioning, second, the problem of distance-decay, and third, the externalities.

2) I might comment on the term "state intervention." State is generally considered as a set of institutions which includes government, politics, the judiciary, armed forces, etc. In this analysis, I use government intervention instead of using state intervention. This is partly because of the different recognition of the system of center-local governmental relations among Japan and other Western countries, especially the U.S. and Britain. As in the U.S., this relation is characterized by equal inter-governmental relations due to political decentralization, therefore, more allowance to local autonomy is acknowledged and the term local state is often used. In Japan, due to the traditional recognition of the absence of real autonomy in the local state, the term "local state" seems unfamiliar. The term "local autonomy" is used rather than either "local state" or "local government." In order to suggest more positively the significance of the use of the term "local government," this analysis adopts "local government" in the Japanese case.

3) At first, the Urban Planning Act was enforced in the six major metropolitan areas in 1919. By 1923, twenty-five cities came under the jurisdiction of this act, and by 1933, 105 among a total of 111 cities in Japan were included.

4) Within government capital formation, construction investment is divided into the following seven items: 1) building, 2) public works, 3) agriculture, 4) natural disaster reconstruction, 5) temples, shrines, and cultural installations, 6) military, and 7) transportation. Government equipment investment is divided into following categories: 1) furniture and fixture, 2) machinery and tools, 3) transportation equipment, and 4) military. In the capital formation by the private sector, construction investment includes building mainly residential and business buildings. It is also taken up the private enterprise investment in electricity and private railways. We can see this in more detail in Emt (1971).

5) By this observation, the number of municipal authorities are fixed at those 107 which became municipalities in the third census year of 1930.

6) Among their achievements, many publications on studies of social survey from "the six major metropolitan areas" governments especially of Osaka and the establishment of a Society for the Study of Municipal Government in Tokyo are worth noting.

7) Tokyo had already been specially treated by the Tokyo Urban Planning Act of 1888.

8) While we do not have any successful academic examples of research of Japanese urbanization in terms of the materialist view, this materialist approach had been most in vogue among the debates over the development of Japanese capitalism. Especially, based on the economic theory of "Das Kapital," researchers tried to clarify the historical characteristics of Japanese capitalism. This theoretical debate over Japanese capitalism, being parallel to that of value theory and rent theory, overwhelmingly dominated the terrain of Japanese social science in prewar days. The researchers practically and politically participated in this debate, which were split into the two factions of "Kosaka" and "Ronoha." The theoretical difference between two factions lay in the specification of the features of the development of Japanese capitalism. Laying aside those contributing to this debate, we can accept for suggestions of those traditional materialist approaches for the practice of public service geography.
References


Staeheli, L. (1989): Accumulation, Legitimation, and the Provision of Public Services in American Me-
tropolis. Urban Geography, 10, 229–250.

戦前期の都市財政と公共サービス

水内 俊雄*

地方政府による公共サービスの供給は、経済社会政治的巨大幅な検討を有する。近年人文地理学において、国家や地方政府の役割、特に国家の介入と言う概念が重要視されてきた。この背景には人文地理学における巨大幅な社会理論論争があった。本稿ではこうした欧米諸国の知的刺激を、戦前期の都市財政資料を用いて、マクロ理論的にかつ詳細な体系的に展開しようとするものである。この展開に際しては、実在論者 (Realist) の示唆する理論的多元主義 (Theoretical pluralism) を念頭においた。

国家の役割に関する唯物主義的見方、そして公共サービスの地理学で得られた成果などを折衷的に利用して、戦前期の日本の都市財政構造と、公共サービスの供給パターンを明らかにした。6大都市政府による都市建造環境への介入の圧倒的な強さが証明され、その政治的社会的背景も明らかにした。またその他の都市についても、地方特有の性格を重視することにより、公共サービス供給に関する柔軟な説明を加えることができた。

* 〒930 富山県富山市 富山大学人文科学部